PANASONIC®

STEREO SYSTEM

OPERATING INSTRUCTIONS

MODEL SE-9000HG

Before operating this set, please read these instructions completely

Dear Stereo Fan

Thank you for selecting this product, and to welcome to the growing family of satisfied PANASONIC product owners around the world.

We feel certain you will obtain the maximum enjoyment from this new addition to your home.

Please read these operating instructions carefully, and be sure to keep them handy for convenient reference.

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PLACEMENT INSTRUCTIONS

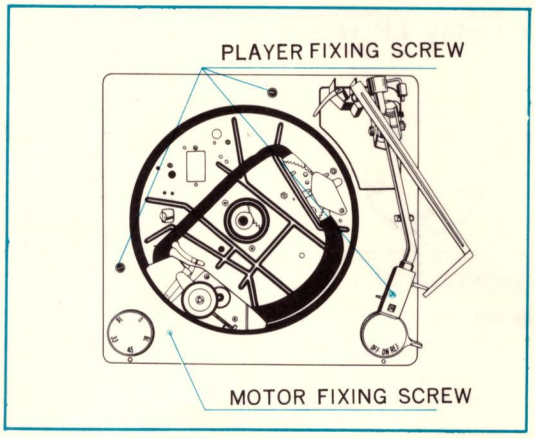
- The set should be placed as close as possible to the power outlet.
- The area surrounding the set should be free from dust, humidity and moisture.
- The floor on which the set rests should be even, and the area free from vibration.
- The set should not be placed near fluorescent lamps, a TV set, motor driven appliances, or in direct sunlight.

PREPARATION OF PLAYER

Remove the following parts.

❶ Turntable support papers.
❷ Record selector fixing rubber.
❸ Pickup fixing string.
❹ Pickup support cover.
❺ Paper spacers.
❻ Motor fixing screw.

* After removing supporting parts, tighten the three player fixing screws.
Now, player preparations are completed.



ANTENNA & GROUND

FM antenna

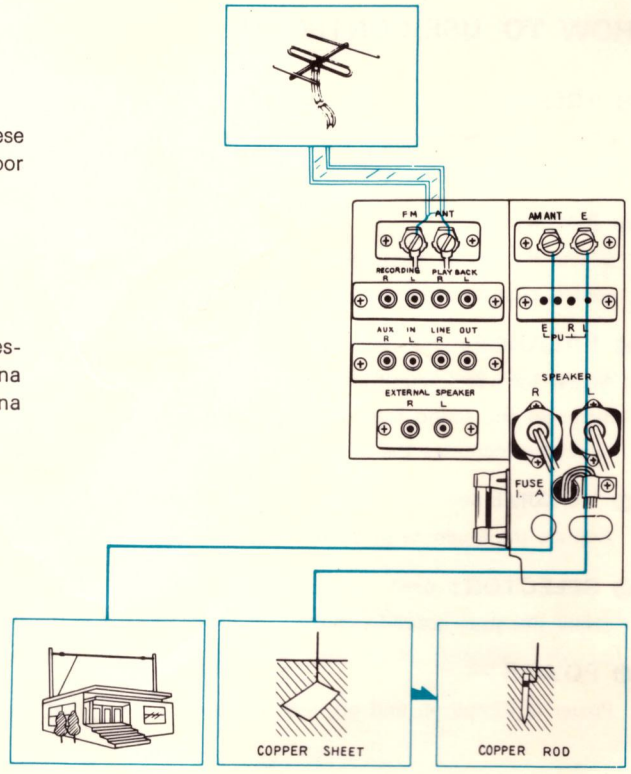
The built-in twin-lead FM antenna is connected to these terminals at the factory. When connecting an outdoor antenna, always disconnect the built-in antenna.

AM antenna

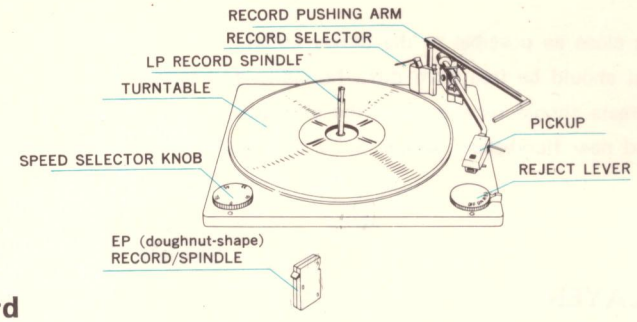
When you want to listen to distant broadcasts, especially on the MW bands, connect an outdoor antenna (about 36 feet long and 24 feet high) to the antenna terminal at the back of the set.

Power supply cord

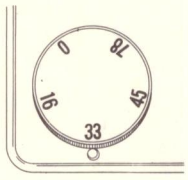
Connect the power outlet only after closing the rear panel. Most humming noise is from reverse insertion of the power plug into the power outlet.
If humming noise is excessive, reverse the power plug insertion.

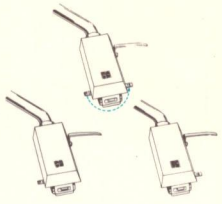


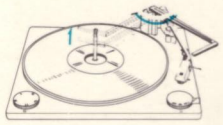
HOW TO USE THE AUTOMATIC PLAYER



To play LP record







❶ Set the speed change control to the speed of the records to be played.

❷ Set the stylus for the type of record. (To change the stylus setting.) (LP, EP records, phono sheets.) (SP records.)

❸ Lift up the record pushing arm and turn to the right (when facing the set).

❹ Place the records on the spindle (up to 6 LPs or 4 SPs). Records of different sizes can be combined, providing they are of the same speed.

HOW TO USE CONTROL

❶ TREBLE :

Boosts or reduces treble response. Turning control clockwise increases (boosts) treble sound. Turning control counter-clockwise decreases treble sounds.

❷ BASS :

Boosts or reduces bass response. Turning control clockwise increases (boosts) bass sound. Turning control counter-clockwise decreases bass sounds.

❸ BALANCE :

Adjust for equal sound level from the left and right speaker systems. Turning the control clockwise increases the sound from right channel speakers and reduces the sound from the left. Turning counter-clockwise increases the left channel sound and reduces sound from the right channel speakers.

❹ VOLUME :

Adjusts the loudness of sound of both channels.

❺ SELECTOR :

Select the your desired radio broadcast band by turning the selector knob.

❻ POWER :

Power is turned on and off with this switch. Note that power cannot be cut off during record play.

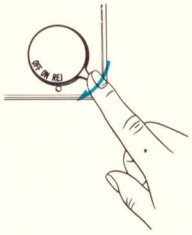
Precautions Before Use

* If you play a phono sheet or a non-standard size record (mainly publicity records), or when you play one record, operate the unit manually.
* Bent or warped records should be played by manual operation, because they can cause slipping or uneven turning.

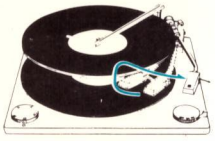
The record speed and stylus should be matched according to the following table.

Record	Speed	Pickup stylus
SP record	78	78
EP (ST) record	45	ST-LP
LP (ST) record	33	ST-LP
ULP record	16	ST-LP
Phono sheet	16, 33, 45	ST-LP

❺ Keep the records horizontal with the record pushing arm.



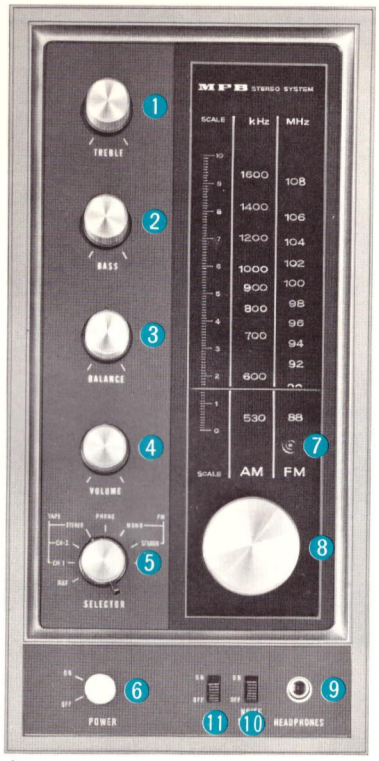
❻ Turn the reject lever to REJ and then let it go at once.



❼ Then play will start. When the last record is finished, the pickup automatically returns and the motor stops.

MANUAL OPERATION

❶ After you have placed the record on the turntable, push the record pushing arm to the center.
❷ Turn the REJ lever to ON.
❸ Place the pickup on the record. Other operations are the same as automatic play.



❼ STEREO EYE :

Lights and remains lit when you have tuned in on FM station broadcasting instereo. You are listening to stereo broadcasts.

❽ TUNING :

To select the desired station.

❾ HEADPHONE JACK :

Provides for private listening with stereophonic headphones. When headphones are plugged into Headphone Jack, the set's speakers are disconnected.

❿ NOISE FILTER :

To decrease high frequency noise, set this knob to "ON".

⓫ AFC SWITCH :

For FM or FM stereo reception only. Keep the AFC switch in "OFF" position while tuning. After the station is tuned in properly slide the AFC switch to "ON" position for drift-free listening.

AUTOMATIC OPERATION

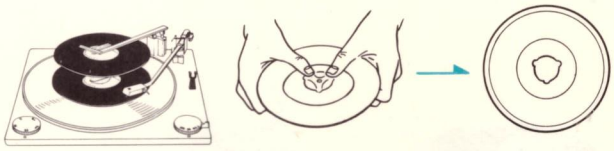
To play "doughnut-shaped " EPs

Make sure the projections are on the same side.

❶ Slip on the attached EP record spindle. In this case both sets of spindle projections should be on the same side.

❷ Other procedures are the same as for normal automatic play (LP records).

To play EP records



❶ Remove the three-pointed center piece (optional center) by pressing it with your fingers as shown in the picture.

❷ Play the record in the same way as a "doughnut" type.

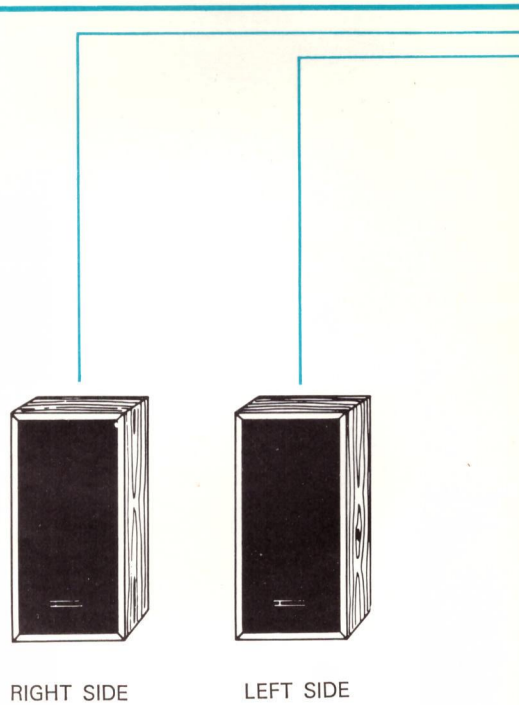
FOR ENJOYING RECORD PERFORMANCE WHILE IN BED

When you go to bed with the turntable operating, or when you listen to a record performance while at work, use the AUTOMATIC sleepe.

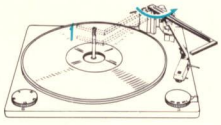
Here's how to operate it:

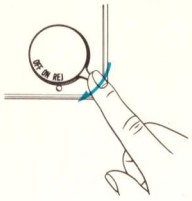
❶ Start playing the record in the same way as an ordinary record performance.

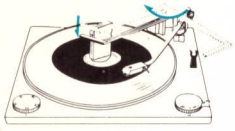
❷ Then set the power switch to the OFF-position. The power is kept on as long as the record is being played.
When the record performance ends and the pickup returns automatically, the player and the entire set are turned off.



Repeated play can be performed only with 17cm records







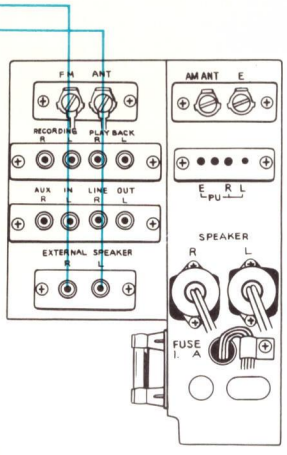
❶ Turn the record pushing arm to the right and place a record on the turn-table.

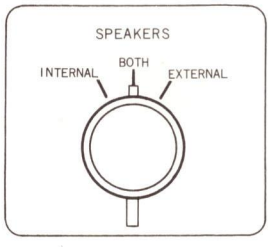
❷ Turn the lever to REJ and lift the record pushing arm.

* Then the record will begin to play.

❸ Replace the record pushing arm to its center position to arrest the play. Repeated play is finished; the pickup will then return to its rest and the motor will switch off.

* Do not attempt to operate the unit in this way for 25cm or 30 cm records; the play will begin in the middle of the record.





SPEAKER CHANGE SWITCH FOR EXTERNAL SPEAKER

CONNECTION

Two pairs of stereo speaker system could not be provided at the same time to enjoy stereo music listening at two different places simultaneously, in other word, from a set, stereo system can be extended to two rooms, which is an ideal feature for big compound houses, etc.

Plug external speakers into the external speaker jacks on the rear of the set.

It is recomended that external speaker units be rated at 10 Watts and have voice coil impedance of 4, 6, or 8, ohms.

FUNCTION

Located on the right side of record changer compartment. Allows selection of INTERNAL, BOTH and EXTERNAL speaker operation.

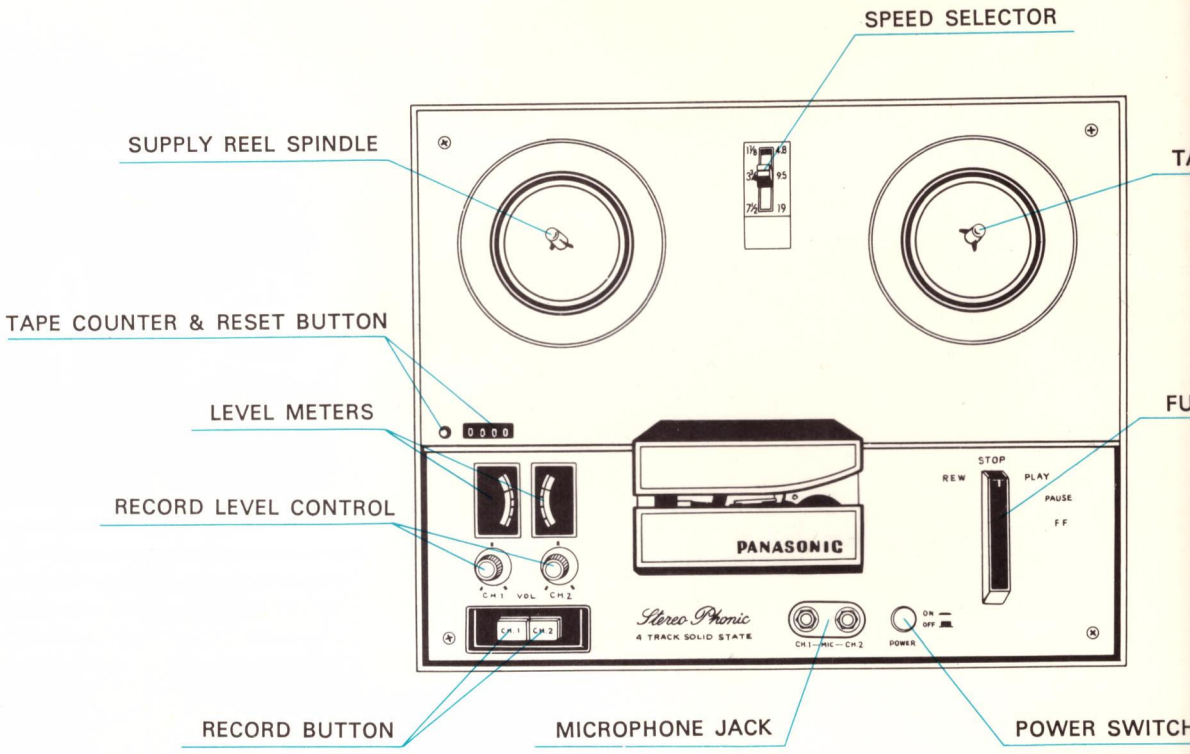
INTERNAL ...Only the internal console speaker operate.

BOTH.....Internal and external speakers operate at the same time. (But INTERNAL speaker don't operate when EXTERNAL speakers are not connected.)

EXTERNAL ...Only external speakers (connected to EXTERNAL SPEAKER jacks). operate.

Note: When using Headphones, only the internal speakers are silenced. Using BOTH position internal and external speakers decrease their power outputs but nothing is wrong with the set.

PARTS IDENTIFICATION OF TAPE RECORDER



HOW TO USE TAPE RECORDER

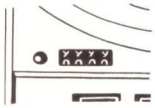
❶ Push the power switch of tape recorder.

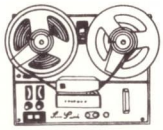
❷ Place on empty tape reel on the takeup reel spindel and a full reel on the supply reel spindle.

❸ Select tape speed.

❹ Push the reset button of tape counter until tape counter indicates 0000.

❺ Unroll about 18 inches of tape, thread it through the tape slot in the head housing and insert the free end of the tape into the slit of the empty reel. Give the reel two or three turns counter-clockwise until the slack is taken up.





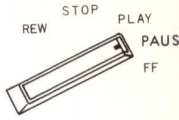
TO RECORD

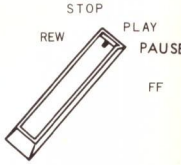
❶ Move the selector knob of the set to the program to be record.

❷ Move the function lever of the tape recorder to PAUSE, pushing the record level controls.

❸ Adjust recording level by turning record level controls. If pointer is at A position, record level is suitable for recording.

❹ Move the function lever of tape recorder to PLAY. Recording will begin.





JP REEL SPINDLE

ION LEVER

TO PLAYBACK

❶ Move the selector knob of the set to TAPE STEREO.

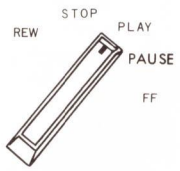
❷ Move the function lever of the tape recorder to PLAY.

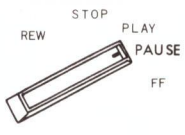
TO STOP TAPE MOTION INSTANTLY

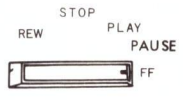
Move the function lever of tape recorder to PAUSE.

TO FAST WIND THE TAPE

Move the function lever of tape recorder to FF.







STOPPING

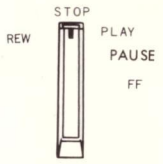
When the tape is wound completely, the motor of the tape recorder stops automatically.

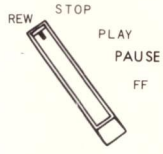
TO STOP WHILE PLAYING

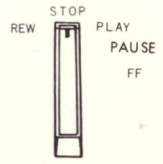
❶ Move the function lever of tape recorder to STOP.

❷ Move the function lever of tape recorder to REW position and rewind tape completely onto the supply reel spindle.

❸ Move the function lever of tape recorder to STOP.







4-TRACK MONAURAL RECORDING & PLAYBACK

TO RECORD ON ALL FOUR TRACKS MONAURALLY :

This tape recorder is also a 4-track monaural recorder. You can record monaurally on all four tracks with a recording time twice as long as stereo.

❶ Make a monaural recording on track 1: Turn the function lever to the PAUSE position while depressing the channel 1 record button and adjust the record level with the channel 1 record level control. Turn down the channel 2 record level control to the lowest record level. Start recording by turning the function lever to the PLAY position. You are now recording on track 1.

❷ At the end of recording on track 1, exchange the full reel (on the right reel spindle) with the now-empty reel and start recording. You are now recording on track 4.

❸ At the end of recording on track 4, exchange both reels again. Adjust the record level as described in 1 above, but using the channel 2 record button and channel 2 record level control. Turn down the channel 1 record level control to the lowest record level. Then start recording. You are now recording on track 3.

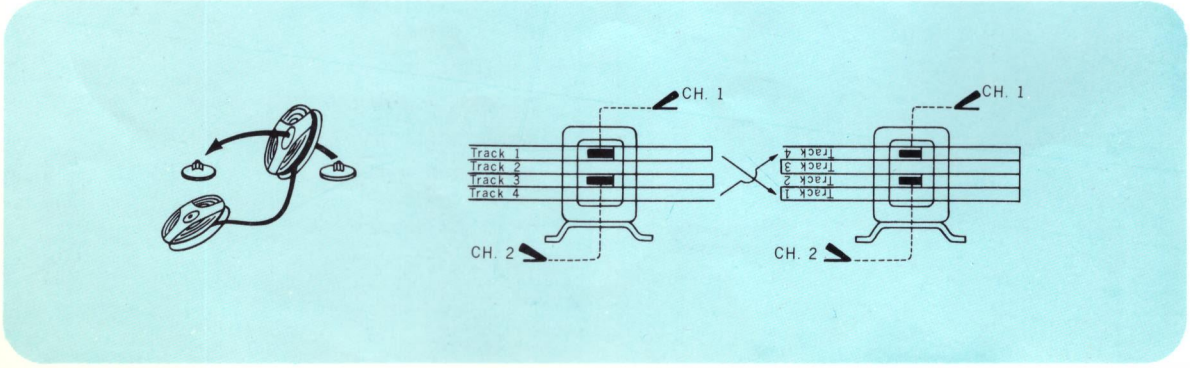
❹ At the end of recording on track 3, exchange both reels once again. Start recording and you are now recording on track 2.

TO PLAYBACK THE FOUR TRACKS MONAURALLY :

After the recording on track 2 has been completed, exchange the reels and start playbock by turning the function lever to the PLAY position. In this case, the recordings on both track 1 and track 3 are simultaneously played back. When you want to playback the track 1 or track 3, set the selector knob of the set to channel 1. The recordings on tracks 2 and 4 will be played back monaurally by exchanging the reels again and proceeding to playback either channsl as described above. When you want to playback track 2 or track 4, set the selector knob to channel 2.

TO RECORD ON THE OTHER SIDE OF THE TAPE :

At the end of stereo recording on track 1 and track 3, remove the full reel from the right (takeup) reel spindle, turn the reel over and place it on the left (supply) reel spindle. The empty reel is replaced on the right (takeup) reel spindle. Then thread the tape.
Proceed to make a stereo recording as described above. You are now recording on track 4 and track 2 stereophonically.



HOW TO USE MIC JACK

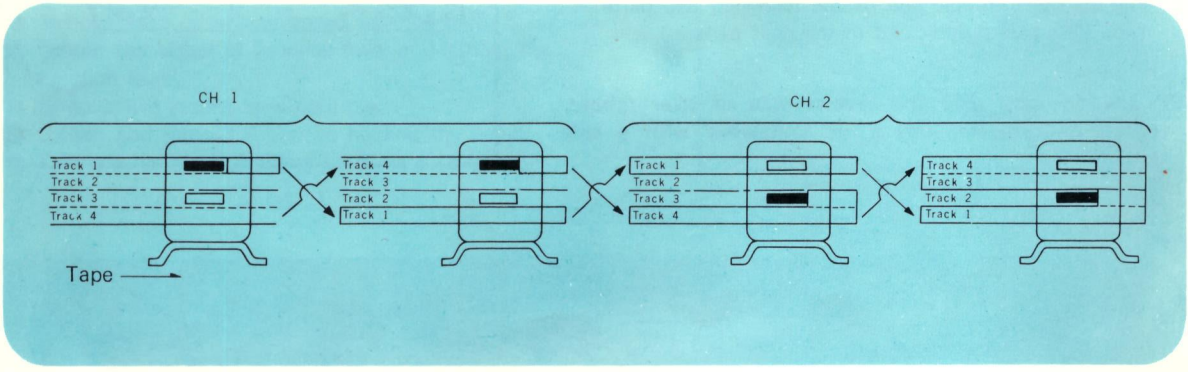
Connect two high impedance, dynamic microphones to the respective microphone jacks. The two microphones should be the same type.

To Record

Move the selector knob of set to PHONO position, and begin to record.

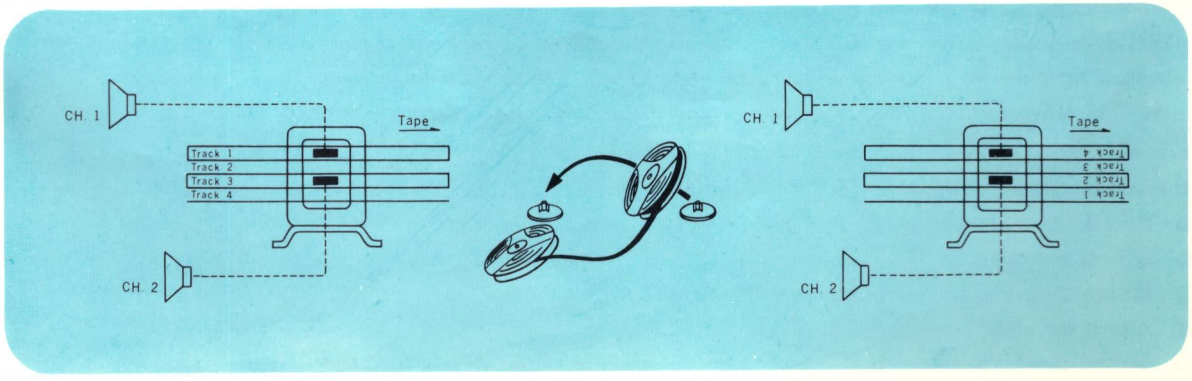
CAUTION

When you use a microphone, keep about 30cm (1 foot) from microphones. Microphones should be used as far from the set as possible.

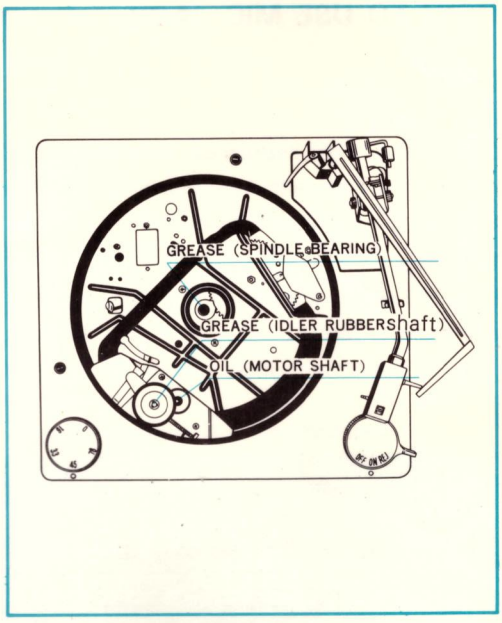


TO PLAYBACK THE OTHER SIDE OF A STEREO TAPE:

This tape recorder is a 4-track stereo recorder. To playback both sides of a stereo tape, as soon as the tape reaches the end of the reel, simply remove the full reel from the right (take-up) reel spindle after you stop the recorder. Turn the reel over and place it on the left (supply) reel spindle. Place the now-empty reel on the right reel spindle and thread the tape. You can now playback track 4 and track 2 of the stereo tape.



OILING



Oil after every 500 hours of use.

1. Pull off the turntable and oil the following two parts:
   (The idler axle is indicated in the next picture.)

* If any oil runs onto the reverse side of idler rubber, capstan or turntable, wipe it off completely with a soft cloth.

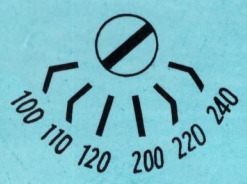


Fig. 1

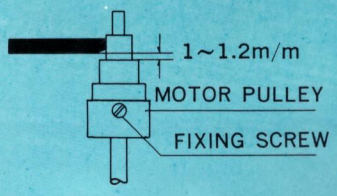
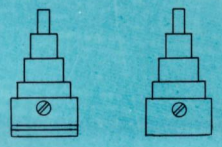


Fig. 2



MOTOR PULLEY

BEFOR PLUGGING THE POWER CORD

• HOW TO SET THE VOLTAGE

If the voltage is different from that of your area, remove the voltage-change screws and set the switch button to the voltage of your area. (Fig. 1)
(You can find it by taking off the back board of the chassis enclosure)

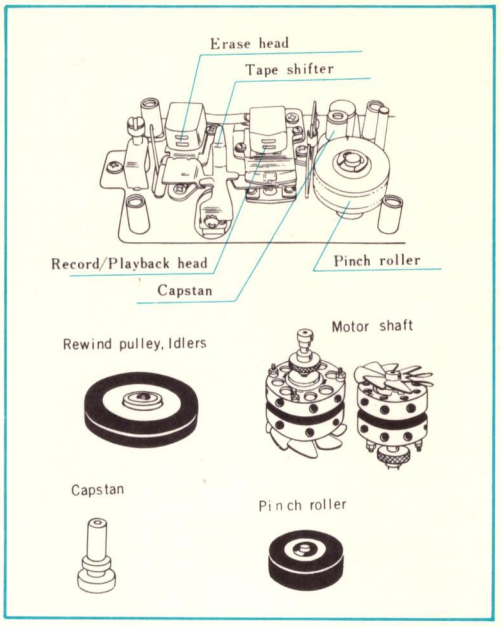
• HOW TO SET THE POWER SOURCE FREQUENCY

AC power frequency varies not only from country to country, but often from region to region. Therefore be careful to check the frequency in your new area. If it is different, the motor pulley must be changed to avoid incorrect turntable revolution speed. Follow these steps when changing the motor pulley (Fig. 2, 3, & 4)

Automatic player (Fig. 2)

❶ Remove the turntable rubber, then pull off the clip of turntable center.
❷ Lift off the turntable.
❸ Loosen the fixing screws and remove the motor pulley.
❹ Attach the other motor pulley.
❺ Set the speed selector knob at 33 and turn the reject lever to ON.

OILING



It is advisable to oil the bearings of the following parts after 300 hour's operation or at least every 6 months. Lubricate each part carefully with the needle of a small syringe, using 1 or 2 drops of a good quality spindle oil:

CAPSTAN, PINCH ROLLER, REWIND PULLEY, IDLERS, CAUTION, MOTOR :

Excessive oiling or oiling of parts which do not require oil Will cause improper performance.

To remove the panel of the tape recorder.

❶ Remove head cover and speed selector knob.
❷ Loosen the screw of function lever and remove the function lever.
❸ Remove two record level controls.
❹ Loosen and remove 4 screws holding the panel.
❺ Take off the panel, holding both sides of it.

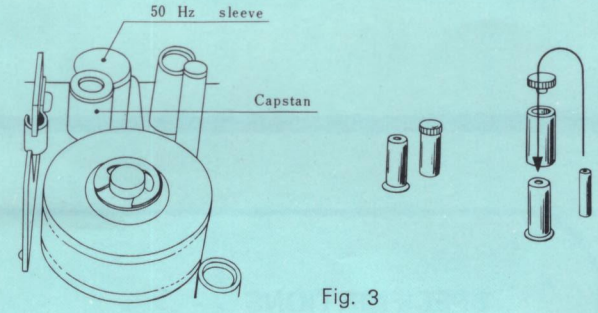


Fig. 3

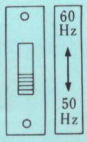


Fig. 4

Tape Recorder (Fig. 3 & 4)

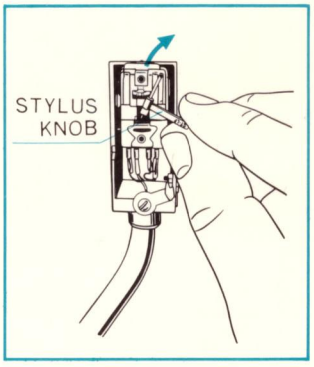
The tape speed varies depending upon cycle of AC mains used. Adjust the recorder to your local cycle if it is not already set for it.

To change 60Hz setting to 50Hz

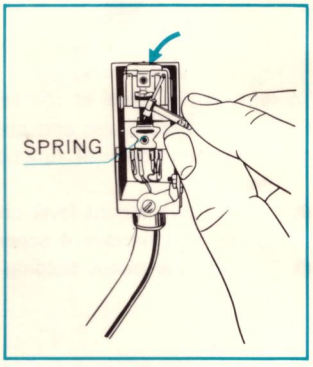
❶ Remove the upper panel.
Remove the record level controls and speed selector knob and remove the function lever by unscrewing the screw holding it. Loosen the four corner screws and lift up the upper panel gently.
❷ Remove the capstan sleeve for 50Hz from the capstan sleeve holder and place it on the capstan.
❸ Change the switch of the motor starter capacitor according to the illustrations, after removing the rear panel of tape recorder. (Fig. 4)

TO REPLACE THE STYLUS

Change the stylus according to the procedure shown in the pictures below.
Stylus life: 1,000 hours Replacement stylus: EPS-13TTSD



Twist the stylus knob in the direction of the arrow to remove it.



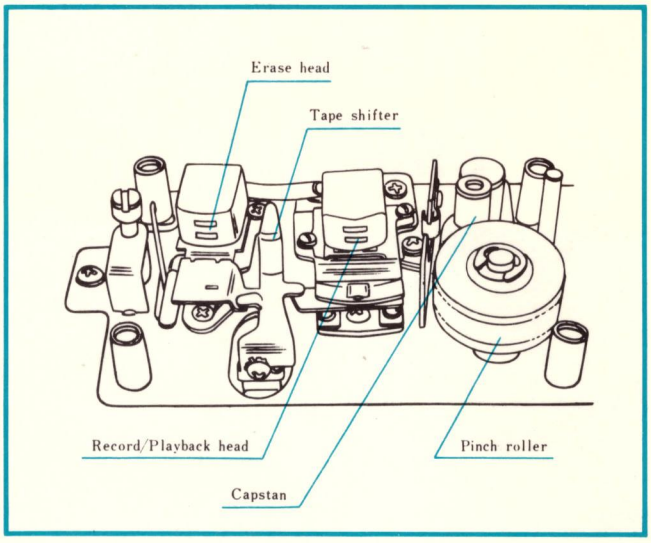
Slip to end of the stylus under the spring while holding the stylus knob.

SPECIFICATIONS

〈FM TUNER SECTION〉	
Frequency Range:	88 MHz~108 MHz
Ant Input Impedance:	300Ω (Bal)
〈AM TUNER SECTION〉	
Frequency Range:	525~1605 kHz
Antenna:	Ferrite Antenna
〈AUDIO SECTION〉	
Peak Music Power:	Total 60W (THD 5% 1kHz)
〈SPEAKER SECTION〉	
System:	2 way 3 speakers
	16cm (6½″) (Cone)
	6.5cm (2½″) (Cone)
	5cm (2″) (Corn)
Cross over Freq.	8kHz, 8KHz
〈PLAYER SECTION〉	
System:	SAP-111WD
Motor:	2 Pole Synchronous motor
Turn Table:	28cm (11″)
Pick Up:	Pipe arm
Cartridge:	Magnstate
Stylus:	Diamond EPS-13TTSD

HEAD CLEANING

Accumulation of dust on heads will lead to unsatisfactory erasure or poor recordings. The front face of the heads should be cleaned occasionally. Use a soft, lint-free cloth lightly dampened with alcohol or with a commercial head-cleaning solution. Remove the head cover by pulling it toward you and clean the residue from heads, capstan, pinch roller, tape shifter and guides.



Speed :	78, 45, 33, 16 rpm
〈TAPE SECTION〉	
Track :	4 Track
Tape speed :	3 Speed 19cm (7½″), 9.5cm (3¾″) 4,75cm (1⅞″).
Frequency Responce :	At 7½″ ips 30~18,000 Hz
	At 3¾″ ips 30~13,000 Hz
	At 1⅞″ ips 30~6,000 Hz
Input Impedance ;	MIC 20KΩ 2 channel
	Auxiliary 100KΩ 2 channel
Output Impedance :	Line Output 300Ω
Transistors :	11
Diodes :	3
〈OTHER〉	
Power Consumption :	35W
Transistors :	31
Diodes :	16
Power Supply :	100, 110, 120, 200, 220, 240V
Power Consumption :	max 56W (Inclu Player & Tape)
Weight :	54kg (11 lbs 91 oz)
Dimension :	1250mm(W) ×701mm(H) ×422mm(D)
	49¼″×17⅞×10¾″

MATSUSHITA ELECTRIC CORP. OF AMERICA

Pan-Am Bldg., 200 Park Ave., New York, N. Y. 10017

Printed in Japan

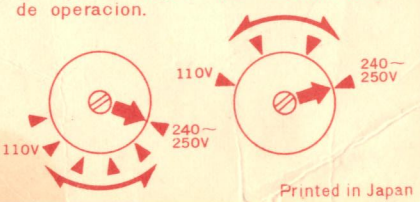
SQX-5063-3

CAUTION

Before plugging your phonograph into AC outlet, be sure that voltage selection switch (or selector) is properly set to your local voltage. If it is set otherwise, the phonograph will not properly work or may be damaged. For setting, refer to the operating instructions.

PRECAUCIÓN

Antes de enchufar su fonografo en una toma de CA (corriente alterna) asegurarse que el selector de voltaje esté correctamente ajustado a su voltaje local. Si está ajustado de otra manera, el fonografo no funcionará bien, y puede ser danado. Para el ajuste seguir las instrucciones de operacion.



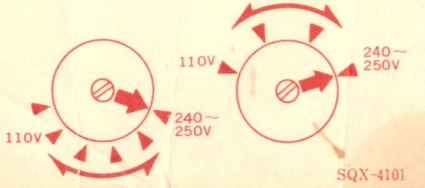
Printed in Japan

ご注意

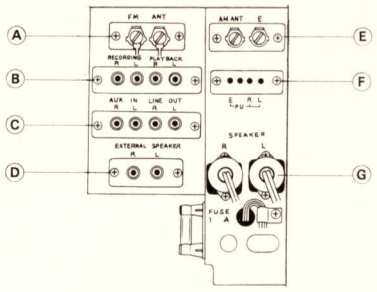
本機の電圧切換スイッチが、あなたの地区の電圧と合っているかを確めて下さい。もし、合っていないと本機を損傷することがあります。電圧切換の詳細については、説明書をご覧下さい。

請注意

在與交流（ＡＣ）電源連接之前，須查明畜音機的電壓轉換開関是否適於当地區之電壓。如不適当時会有損毀畜音機之虞。欲知電壓轉換方法之備細，請參閱操作須知。



SQX-4101



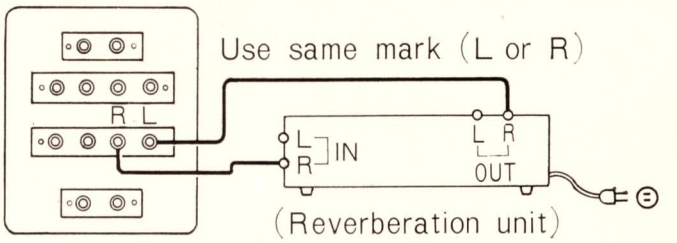
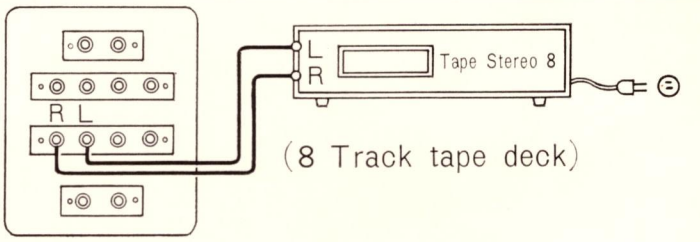
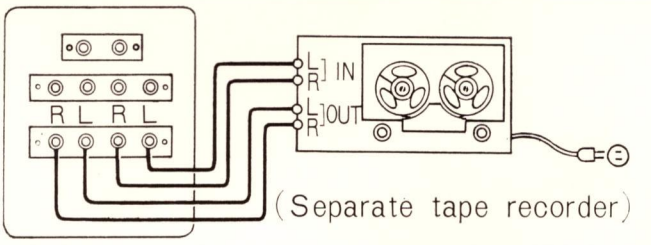
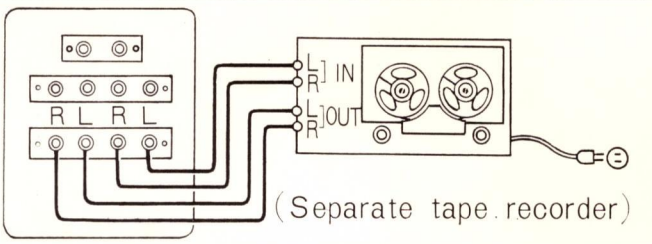
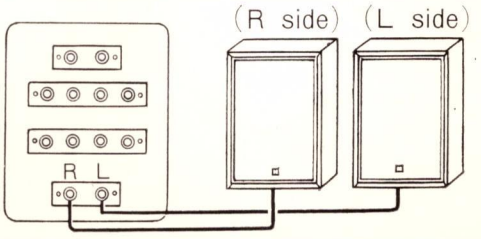
Ⓐ FM antenna terminal
Ⓑ Recording and playback terminal of
Ⓒ AUX IN ·····To be connected with p
LINE OUT ···Any recording sources a
Ⓓ EXT SPEAKER·····Connecting to sepa
Ⓔ AM antenna terminal,
Ⓕ Pick up terminal of built in automati
Ⓖ speaker terminal.

	Selector position		Adjusting
For Reverberation Unit	Any position is except AUX position		By Reverberation unit
For 8 Track tape deck	AUX		Volume control of this
For recording and playback by Separate tape recorder	Any position		For recording, Level control of tape re
	AUX		For playback, Volume control of this
For dubbing with tape deck of this set and separate tape recorder	TAPE	Recording from this set to separate tape recorder.	Level control of separat recorder
	AUX	Recording from separate tape recorder to this set.	Level control of tape de this set
For external speaker system (Impedance 8Ω)	BOTH or EXTERNAL position of speaker change switch		Volume control of this

nation Chart

uilt-in tape recorder.
ɔgram source whose output is high level such as tape recorder and TV set.
e playble through the terminal.
ate speaker system.

player,

	Terminal marks	Connection
	LINE OUT (R) (L)	
et	AUX (R) (L)	
order	AUX (R) (L)	
et	LINE OUT (R) (L)	
tape	AUX (R) (L)	
k of	LINE OUT (R) (L)	
et	EXTERNAL SPEAKER (R) (L)	

PANASONIC®

DIRECTORY OF PANASONIC SERVICENTERS

PRODUCT SERVICE

Reliability standards observed in design and manufacture ensure you that ownership of a PANASONIC product means maximum service for you, minimum service for the product. Should your instrument ever require service, a nationwide system of independent Authorized Servicenters in maintained by the Matsushita Electric Corporation of America in Support of your PANASONIC warranty.

The PANASONIC Executive and General Offices are not equipped to service your product. Please do not ship equipment there under any circumstances.

Terms of the warranty require that proof of date of purchase and/or delivery must be presented by the original user when applying for in-warranty service.

PLEASE RETAIN SALES OR DELIVERY RECEIPTS TO VALIDATE WARRANTY

READ YOUR WARRANTY COMPLETELY

USE OF THIS DIRECTORY

The location of all authorized Panasonic Servicenters is shown in this booklet. Following each address, codes denoting available service are shown.

CODE	ELECTRONIC PRODUCTS
R1	Hi-Fi Equipment
R2	Phonograph, Portable
R3	Console, Radio-Phonograph
R4	Radio, Table or Portable
R5	Transceivers
R6	Car Radio
TR	Tape Recorder, Audio
TRC	Tape Recorder, Car
TV	TV, Black & White
CTV	TV, Color

CODE	APPLIANCES
A1	Food Appliances
A2	Pencil Sharpeners
A3	Fans, Desk lamp
A4	Shavers
A5	Refrigerators
A6	Vacuum Cleaner, Automobile

INSIST ON GENUINE PANASONIC REPLACEMENT PARTS